

**SOUTH CAROLINA
DEPARTMENT OF HEALTH AND ENVIRONMENTAL CONTROL
AIR POLLUTION CONTROL REGULATIONS AND STANDARDS**

**REGULATION 61-62.1
DEFINITIONS AND GENERAL REQUIREMENTS**

SECTION I - DEFINITIONS

The following words and phrases when used in the Regulations and Standards shall for the purpose of these regulations have the meanings respectively ascribed to them in this section, unless a different meaning is clearly indicated. This section augments Section 1 of the South Carolina Pollution Control Act.

1. Acid Mist - Mist or droplets of sulfuric or other acids. Sulfuric acid mist includes sulfur trioxide (SO₃) and sulfuric acid vapor as well as liquid mist.
2. Add - Additions to a process which will increase size, scope or emissions from such process.
3. Administrator - The Administrator of the United States Environmental Protection Agency (EPA) or his/her designee.
4. Afterburner - An auxiliary burner for destroying unburned or partially burned combustion gases after they have passed from the combustion chamber.
5. Air Curtain Incinerator - An incinerator that operates by forcefully projecting a curtain of air across an open chamber or pit in which burning occurs. Incinerators of this type can be constructed above or below ground and require a refractory lined chamber or pit.
6. Alter - Alter means modification or change in a process or processes which would affect emissions to the atmosphere.
7. Ambient Air Quality Standards - That standard for the quality of ambient air at or beyond a property line on which a source of pollution is emitting.
8. Application - Means a form provided by the Department which is prescribed to provide the information required to grant approval to construct and operate a source or an incinerator; or to report an existing incinerator.
9. Biologicals - preparations made from living organisms and their products, including vaccines, cultures, etc., intended for use in diagnosing, immunizing, or treating humans or animals or in research pertaining thereto.
10. Blood Products - any product derived from human blood, including but not limited to blood plasma, platelet, red or white blood corpuscles, and other derived licensed products, such as interferon, etc.
11. Board - Board means Board of Health and Environmental Control.
12. Body Fluids - liquid emanating or derived from humans and limited to blood; dialysate; amniotic,

cerebrospinal, synovial, pleural, peritoneal and pericardial fluids; and semen and vaginal secretions.

13. Boiler - An enclosed device using controlled flame combustion and having specific characteristics including the following:

a. The combustion chamber and primary energy recovery section shall be of integral design (e.g. waste heat recovery boilers attached to incinerators are not boilers). To be of integral design, the combustion chamber and the primary energy recovery sections (such as water walls and super heaters) shall be physically formed into one manufactured or assembled unit. A unit in which the combustion chamber and the primary energy recovery sections are joined only by ducts or connections carrying flue gas is not integrally designed; however, secondary energy recovery equipment (such as economizers or air preheaters) need not physically be formed into the same unit as the combustion chamber and the primary energy recovery section. The following units are not precluded from boilers solely because they are not of integral design: process heaters (units that transfer energy directly to a process stream), and fluidized bed combustion units.

b. At least 75% of recovered energy shall be “exported”, i.e., not used for internal uses like preheating of combustion air or fuel, or driving combustion air fans or feedwater pumps.

14. Bypass stack - a device used for discharging combustion gases to avoid severe damage to the air pollution control device or other equipment.

15. Chemotherapeutic Waste - All waste resulting from the production or, use of antineoplastic agents used for the purpose of stopping or reversing the growth of malignant cells. Chemotherapeutic waste shall not include any waste containing antineoplastic agents that are listed as hazardous waste under S.C. Hazardous Waste Management Regulation 61-79.261.

16. Clean Wood - Untreated wood or untreated wood products including clean untreated lumber, tree stumps (whole or chipped), and tree limbs (whole or chipped). Clean wood does not include yard waste, which is defined elsewhere in this Section, or construction, renovation, and demolition waste (including but not limited to railroad ties and telephone poles).

17. Commercial Incinerator - An incinerator that burns non-hazardous waste from commercial activities with a design capacity of no more than 1250 lb/hr and which burns no more than 6 tons/day. Incinerators of this type not meeting these limits are considered municipal waste combustors. This definition does not include retail and industrial incinerators nor does it include waste from maintenance activities at commercial establishments.

18. Commissioner - Commissioner means the Commissioner of the Department of Health and Environmental Control.

19. Conditional major source - A stationary source that obtains a federally enforceable physical or operational limitation from the Department to limit or cap the stationary source’s potential to emit to avoid being defined as a major source as defined in S.C. Regulation 61-62.70, Title V Operating Permit Program.

20. Continuous emission monitoring system or CEMS - a monitoring system for continuously measuring and recording the emissions of a pollutant from an affected facility.

21. “Continuous program of physical on-site construction” - Means significant and continuous site preparation work such as major clearing or excavation followed by placement of footings, pilings, and

other materials of construction, assembly, or installation of unique facilities or equipment at the site of the source. With respect to a change in the method of operating, this term refers to those on-site activities other than preparatory activities which mark the initiation of the change.

22. Crematory Incinerator - Any incinerator designed and used solely for the burning of human remains or animal remains.

23. Department - Department means the Department of Health and Environmental Control.

24. Dioxins/furans - the combined emissions of tetra- through octa-chlorinated dibenzo-paradioxins and dibenzofurans, as measured by EPA Reference Method 23.

25. Emission Data - The definition contained in 40 CFR 2.301(a)(2), July 1, 1986, is incorporated by reference.

26. Emission Limitation (and emission standard) - A requirement established by the State or by the Administrator of the Environmental Protection Agency which limits the quantity, rate, or concentration of emissions of air pollutants on a continuous basis, including any requirements which limit the level of opacity, prescribe equipment, set fuel specifications, or prescribe operation or maintenance procedures for a source to assure continuous emission reduction.

27. Federally enforceable - All limitations and conditions which are enforceable by the Administrator of the U.S. Environmental Protection Agency (EPA) and citizens under the Act, including those requirements developed pursuant to 40 CFR 60 and 61, requirements within the South Carolina State Implementation Plan (SIP), any permit requirements established pursuant to 40 CFR 52.21 or under regulations approved pursuant to 40 CFR 51, Subpart I, including operating permits issued under an EPA-approved program that is incorporated into the SIP and expressly requires adherence to any permit issued under such program.

28. Fuel Burning Operation - Use of furnace, boiler, device or mechanism used principally but not exclusively, to burn any fuel for the purpose of indirect heating in which the material being heated is not contacted by and adds no substance to the products of combustion.

29. Fugitive Dust - A type of particulate emission that becomes airborne by forces of wind, man's activity or both, including but not limited to, construction sites, tilled land, materials storage piles, and materials handling.

30. Fugitive Emissions - Air contaminants which escape to the air not through an exhaust system, but through other means, including but not limited to, windows, vents, doors, ill-fitting closures or poorly maintained equipment.

31. Garbage - Animal and vegetable waste resulting from the handling, preparation, cooking and serving of foods.

32. Hazardous Air Pollutant - A pollutant which is the subject of National Emission Standards for Hazardous Air Pollutants promulgated by the United States Environmental Protection Agency by publication in the Federal Register.

33. Hazardous Waste - Any waste identified as such by South Carolina Hazardous Waste Management Regulation 61-79.

34. Hazardous Waste Fuel - Hazardous waste that has a heat value greater than 5000 BTU/lb. and is burned in an industrial or utility boiler or industrial furnace for energy recovery, except for hazardous wastes exempted by Section 266.30(b) of South Carolina Hazardous Waste Management Regulation 61-79.

35. Hazardous Waste Incinerator - An incinerator whose primary function is to combust hazardous waste, except for devices which have qualified for exemption as provided in Sections 264.340(b) or 265.340(b) of South Carolina Hazardous Waste Management Regulation 61-79.

36. Hospital - any facility which has an organized medical staff, maintains at least six inpatient beds, and where the primary function of the institution is to provide diagnostic and therapeutic patient services and continuous nursing care primarily to human inpatients who are not related and who stay on average in excess of 24 hours per admission. This definition does not include facilities maintained for the sole purpose of providing nursing or convalescent care to human patients who generally are not acutely ill but who require continuing medical supervision.

37. Hospital/medical/infectious waste incinerator or HMIWI or HMIWI unit - any device that combusts any amount of hospital waste and/or medical/infectious waste.

38. Hospital waste - discards generated at a hospital, except unused items returned to the manufacturer. The definition of hospital waste does not include human corpses, remains, and anatomical parts that are intended for interment or cremation.

39. Incinerator - Any engineered device used in the process of controlled combustion of waste for the purpose of reducing the volume, removing the contamination and/or reducing or removing the hazardous potential of the waste charged by destroying combustible matter leaving the noncombustible ashes, material and/or residue and which does not meet the criteria nor classification as a boiler nor is listed as an industrial furnace.

40. Industrial Boiler - A boiler that produces steam, heated air, or other heated fluids for use in a manufacturing process.

41. Industrial Furnace - Any of the following enclosed devices that are integral components of manufacturing processes and that use controlled flame devices to accomplish recovery of materials or energy:

a. Cement kilns

b. Lime kilns

c. Aggregate kilns

d. Phosphate kilns

e. Coke ovens

f. Blast furnaces

g. Smelting, melting and refining furnaces (including pyrometallurgical devices such as tray furnaces, cupolas, reverberator furnaces, sintering machines, roasters, and foundry furnaces)

h. Titanium dioxide chloride process oxidation reactors

i. Methane reforming furnaces

j. Pulping liquor recovery furnaces

k. Combustion devices used in the recovery of sulfur values from spent sulfuric acid

l. Such other devices as the Department may determine on a case by case basis using one or more of the following factors:

i. The design and use of the device primarily to accomplish recovery of material products;

ii. The use of the device to burn or reduce raw materials to make a material product;

iii. The use of the device to burn or reduce secondary materials as effective substitutes for raw materials, in processes using raw materials as principal feedstocks;

iv. The use of the device to burn or reduce secondary materials as ingredients in an industrial process to make a material product;

v. The use of the device in common industrial practice to produce a material product; and,

vi. Other factors, as appropriate.

42. Industrial Incinerator - Any incinerator utilized in an industrial plant that does not meet the definition for any other type incinerator or an incinerator used to combust Type 5 or 6 waste at any site.

43. In Existence - Means that the owner or operator has obtained all necessary construction permits required by this Bureau and either has (a) begun, or caused to begin, a continuous program of physical on-site construction of the source or (b) entered into binding agreements or contractual obligations, which cannot be canceled or modified without substantial loss to the owner or operator, to undertake a program of construction of the source to be completed in a reasonable time, or that the owner or operator possesses a valid operating permit for the source prior to the effective date of a regulation or standard.

44. "Kraft pulp mill" - Any stationary source which produces pulp from wood by cooking (digesting) wood chips in a water solution of sodium hydroxide and sodium sulfide (white liquor) at a high temperature and pressure. Regeneration of the cooking chemicals through a recovery process is also considered part of the kraft pulp mill.

45. Major Plant - Except as otherwise provided, this term refers to any plant which directly emits, or has the potential to emit, one hundred tons per year or more of any regulated air pollutant.

46. Malfunction - any sudden, infrequent, and not reasonably preventable failure of air pollution control equipment, process equipment, or a process to operate in a normal or usual manner. Failures that are caused, in part, by poor maintenance or careless operation are not malfunctions. During periods of malfunction the operator shall operate within established parameters as much as possible, and monitoring of all applicable operating parameters shall continue until all waste has been combusted or until the malfunction ceases, whichever comes first.

47. Mass Emission Rate - The weight discharged per unit of time.

48. Medical/infectious waste - any waste generated in the diagnosis, treatment, or immunization of human beings or animals, in research pertaining thereto, or in the production or testing of biologicals listed below, and any waste defined as infectious waste in R.61-105, *Infectious Waste Management*. The definition of medical/infectious waste does not include hazardous waste identified or listed in R.61-79.261, *Hazardous Waste Management*; household waste, as defined in R.61-79.261.4(b)(1); ash from incineration of medical/infectious waste, once the incineration process has been completed; human corpses, remains, and anatomical parts that are intended for interment or cremation; and domestic sewage materials identified in R.61-79.261.4(a)(1).

a. Cultures and stocks of infectious agents and associated biologicals, including: cultures from medical and pathological laboratories; cultures and stocks of infectious agents from research and industrial laboratories; wastes from the production of biologicals; discarded live and attenuated vaccines; and culture dishes and devices used to transfer, inoculate, and mix cultures.

b. Human pathological waste - tissues, organs, and body parts and body fluids that are removed during surgery or autopsy, or other medical procedures, and specimens of body fluids and their containers.

c. Human blood and blood products including:

(i) Liquid waste human blood;

(ii) Products of blood;

(iii) Items saturated and/or dripping with human blood; or

(iv) Items that were saturated and/or dripping with human blood that are now caked with dried human blood; including serum, plasma, and other blood components, and their containers which were used or intended for use in either patient care, testing and laboratory analysis or the development of pharmaceuticals. Intravenous bags are also included in this category.

d. Sharps - instruments used in animal or human patient care or treatment or in medical, research, or industrial laboratories, including hypodermic needles, syringes (with or without the attached needle), pasteur pipettes, scalpel blades, blood vials, needles with attached tubing, and culture dishes (regardless of presence of infectious agents). Also included are other types of broken or unbroken glassware that were in contact with infectious agents, such as used slides and cover slips.

e. Animal waste including contaminated animal carcasses, body parts, and bedding of animals that were known to have been exposed to infectious agents during research (including research in veterinary hospitals), production of biologicals or testing of pharmaceuticals.

f. Isolation wastes - biological waste and discarded materials contaminated with blood, excretions, exudates, or secretions from humans who are isolated to protect others from highly communicable diseases, or isolated animals known to be infected with highly communicable diseases.

g. Unused sharps including the following unused, discarded sharps: hypodermic needles, suture needles, syringes, and scalpel blades.

49. Multiple-Chamber Incinerator - An incinerator consisting of at least two refractory lined combustion chambers (primary and secondary) in series, physically separated by refractory walls, interconnected by gas passage ports or ducts.

50. Municipal Solid Waste, MSW or Municipal-type Solid Waste - Household, commercial/retail, and/or institutional waste. Household waste includes material discarded by single and multiple residential dwellings, hotels, motels, and other similar permanent or temporary housing establishments or facilities. Commercial/retail waste includes material discarded by stores, offices, restaurants, warehouses, nonmanufacturing activities at industrial facilities, and other similar establishments or facilities. Institutional waste includes material discarded by schools, nonmedical waste discarded by hospitals, material discarded by nonmanufacturing activities at prisons and government facilities, and material discarded by other similar establishments or facilities. Household, commercial/retail, and institutional wastes include:

- (a) Yard waste;
- (b) Refuse-derived fuel; and
- (c) Motor vehicle maintenance materials limited to vehicle batteries and tires.

Household, commercial/retail, and institutional waste (MSW) does not include used oil; sewage sludge; wood pallets; construction, renovation, and demolition wastes (which includes but is not limited to railroad ties and telephone poles); clean wood; industrial process or manufacturing wastes (including type 5 or 6 waste); medical waste; radioactive contaminated waste; hazardous waste; or motor vehicles (including motor vehicle parts or vehicle fluff).

51. Municipal Waste Combustor, MWC, or Municipal Waste Combustor Unit - Any setting or equipment that combusts solid, liquid, or gasified municipal solid waste including, but not limited to, field-erected incinerators (with or without heat recovery), modular incinerators (starved-air or excess-air), boilers (i.e., steam generating units) and furnaces (whether suspension-fired, grate-fired, mass-fired, or fluidized bed-fired, etc.), air curtain incinerators, and pyrolysis/combustion units. Municipal waste combustors do not include pyrolysis/combustion units located at a plastics/rubber recycling units. Municipal waste combustors do not include internal combustion engines, gas turbines, or other combustion devices that combust landfill gases collected by landfill gas collection systems.

For the purpose of determining reconstruction or modification, as defined in 40 CFR 60, Subpart A or Regulation 62.5, Standard 3, to a municipal waste combustor the following applies:

(a) The boundaries of a municipal solid waste combustor are defined as follows. The municipal waste combustor unit includes, but is not limited to, the municipal solid waste fuel feed system, grate system, flue gas system, bottom ash system, and the combustor water system. The municipal waste combustor boundary starts at the municipal solid waste pit or hopper and extends through:

(i) The combustor flue gas system, which ends immediately following the heat recovery equipment or, if there is no heat recovery equipment, immediately following the combustion chamber;

(ii) The combustor bottom ash system, which ends at the truck loading station or similar ash handling equipment that transfer the ash to final disposal, including all ash handling systems that are connected to the bottom ash handling system; and

(iii) The combustor water system, which starts at the feed water pump and ends at the piping exiting the steam drum or superheater.

(b) The municipal waste combustor unit does not include air pollution control equipment, the stack,

water treatment equipment, or the turbine-generator set.

52. Non-Industrial Boiler - Any boiler not classified as an industrial boiler.

53. Non-Industrial Furnace - Any furnace not classified as an industrial furnace.

54. Non-Spec. Oil (Off-Spec. Oil) - See definition of used oil.

55. Opacity - The degree to which emissions reduce the transmission of light and obscure the view of an object in the background.

56. Open Burning - Any fire or smoke-producing process which is not conducted in any boiler plant, furnace, high temperature processing unit, incinerator or flare, or in any other such equipment primarily designed for the combustion of fuel or waste material.

57. PM₁₀ - Particulate matter with an aerodynamic diameter less than or equal to a nominal 10 micrometers as measured by a reference method based on Appendix J of 40 CFR 50 and designated in accordance with 40 CFR 53 or by an equivalent method designated in accordance with 40 CFR 53, July 1, 1987.

58. PM₁₀ Emissions - Finely divided solid or liquid material with an aerodynamic diameter less than or equal to a nominal 10 micrometers emitted to the ambient air as measured by a reference method approved by the Department, with concurrence of the U. S. Environmental Protection Agency.

59. Part 70 permit - Any permit or group of permits covering a source subject to the permitting requirements of S.C. Regulation 61-62.70. The use of the term "Title V Permit" shall be construed to mean "Part 70 Permit."

60. Particulate Matter - Any material, except uncombined water, that exists in a finely divided form as a liquid or solid at standard conditions.

61. Particulate Matter Emissions - All finely divided solid or liquid material, other than uncombined water, emitted to the ambient air as measured by an applicable reference method described in 40 CFR 60, July 1, 1987, or an equivalent or alternative method approved by the Department, with the concurrence of the U. S. Environmental Protection Agency.

62. Pathological waste - waste material consisting of only human or animal remains, anatomical parts, and/or tissue, the bags/containers used to collect and transport the waste material, and animal bedding (if applicable).

63. Plant - Except as otherwise provided, any stationary source or combination of stationary sources, which is located on one or more contiguous or adjacent properties and owned or operated by the same person(s) under common control.

64. Plastics/Rubber Recycling Unit - An integrated processing unit where plastics, rubber, and/or rubber tires are the only feed materials (incidental contaminants may be included in the feed materials) and they are processed into a chemical plant feedstock or petroleum refinery feedstock, where the feedstock is marketed to and used by a chemical plant or petroleum refinery as input feedstock. The combined weight of the chemical plant feedstock and petroleum refinery feedstock produced by the plastics/rubber recycling unit on a calendar quarter basis shall be more than 70 percent of the combined weight of the plastics, rubber, and rubber tires processed by the plastics/rubber recycling unit on a calendar quarter

basis. The plastics, rubber, and/or rubber tire feed materials to the plastics/rubber recycling unit may originate from the separation or diversion of plastics, rubber, or rubber tires from MSW or industrial solid waste, and may include manufacturing scraps, trimmings, and off-specification plastics, rubber, and rubber tire discards. The plastics, rubber, and rubber tire feed materials to the plastics/rubber recycling unit may contain incidental contaminants (e.g., paper labels on plastic bottles, metal rings on plastic bottle caps, etc.).

65. Potential to Emit - The maximum capacity of a plant to emit a regulated pollutant under its physical and operational design. Any physical or operational limitation on the capacity of the plant to emit a regulated pollutant, including air pollution control equipment and restrictions on hours of operation or on the type or amount of material combusted, stored, or processed, shall be treated as part of its design only if the limitation or the effect it would have on emissions is federally enforceable. Secondary emissions do not count in determining the potential to emit of a plant.

66. Process Industry - Any source engaged in the manufacture, processing, handling, treatment, forming, storing or any other action upon materials except fuel-burning operations.

67. Process Weight - The total weight of all materials introduced into a source operation, including air and water where these materials become an integral part of the product, and solids used as fuels but excluding liquids and gases used solely as fuels.

68. Process Weight Rate - A rate established as follows:

a. For continuous or long-run steady-state source operations, the total process weight for the entire period of continuous operation or for a typical portion thereof, divided by the number of hours of such period or portion thereof.

b. For cyclical or batch unit operations, or unit processes, the total process weight for a period that covers a complete operation or an integral number of cycles, divided by the hours of actual process operation during such a period.

Where the nature of any process or operation or the design of any equipment is such as to permit more than one interpretation of this definition, the interpretation that results in the minimum value for allowable emission shall apply.

69. Pyrolysis/Combustion Unit - A unit that produces gases, liquids, or solids through the heating of waste, and the gases, liquids, or solids produced are combusted and emissions vented to the atmosphere.

70. Refuse - Garbage, rubbish and/or trade waste.

71. Refuse-derived Fuel - A type of municipal solid waste produced by processing municipal solid waste through shredding and size classification. This includes all classes of refuse-derived fuel including low-density fluff refuse-derived fuel through densified refuse-derived fuel and pelletized refuse-derived fuel.

72. Retail Business Type Incinerator - An incinerator that combusts waste typical of a retail business rather than domestic, commercial, or industrial activities.

73. Rubbish - Solid wastes from residences and dwellings, commercial establishments, and institutions.

74. Salvage Operations - Any operation of a business, trade, or industry engaged in whole or in part in

salvaging or reclaiming any product or material including, but not limited to, metals, chemicals, shipping containers, drums or automobiles.

75. Secondary Emissions - Emissions which would occur as a result of the construction or operation of a major plant or major modification, but do not come from the major plant or major modification itself. Secondary emissions shall be specific, well defined, quantifiable, and shall impact the same general area as the plant or modification which causes the secondary emissions. Secondary emissions may include, but are not limited to:

a. emissions from ships or trains moving to or from the new or modified plant.

b. emissions from any offsite support operation which would not otherwise be constructed or increase its emissions as a result of the construction or operation of the major plant or major modification.

76. Sludge Incinerator - An incinerator that combusts wastes containing more than 10% (dry weight basis) sludge produced by municipal or industrial waste water treatment plants or each incinerator that charges more than 2205 lb/day (dry weight basis) of sludge produced by municipal or industrial wastewater treatment plants.

77. Smoke - Small gasborne and airborne particles arising from a process of combustion in sufficient number to be observable by a person of normal vision under normal conditions.

78. Solid Fuel - A fuel which is fired as a solid such as coal, lignite and wood.

79. Spec. Oil - See definition of used oil.

80. Stack - Any flue, conduit, chimney, or opening arranged to conduct an effluent into the open air.

81. Stack Height - The vertical distance measured in feet between the point of discharge from the stack or chimney into the outdoor atmosphere and the elevation of the land thereunder.

82. Standard Conditions - 760 millimeters of mercury at 25° Centigrade.

83. Stationary Source - Any building, structure, installation or process which emits or may emit an air pollutant subject to regulation by any national or state standard. Use of the term "source" is to be construed to mean "stationary source."

84. Substantial loss - Generally means a loss which would equal or exceed 10 percent of the total initial project cost.

85. Synthetic minor plant - A stationary source that obtains a federally enforceable physical or operational limitation from the Department to limit or cap the stationary source's potential to emit to avoid being defined as a major plant or major modification, as defined in S.C. Regulation 61-62.5, Standard No. 7, Section I, Prevention of Significant Deterioration ("PSD").

86. The Act - The Clean Air Act, as amended, 42 U.S.C. 7401, *et seq.*

87. "Total reduced sulfur (TRS)" - The sum of the sulfur compounds hydrogen sulfide, methyl mercaptan, dimethyl sulfide, and dimethyl disulfide, that are released during the kraft pulping operation.

88. Total Suspended Particulate (TSP) - Particulate matter as measured by the method described in

Appendix B, 40 CFR 50, July 1, 1987.

89. Trade Waste - All solid, liquid or gaseous material or rubbish resulting from construction, building operations, or the prosecution of any business, trade or industry including, but not limited to, plastic products, cartons, paint, grease, oil and other petroleum products, chemicals and cinders.

90. Untreated lumber - Wood or wood products that have been cut or shaped and include wet, air-dried, and kiln-dried wood products. Untreated lumber does not include wood products that have been painted, pigment-stained, or "pressure-treated." Pressure-treating compounds include, but are not limited to, chromate copper arsenate, pentachlorophenol, and creosote.

91. Used Oil - Any oil that has been refined from crude or synthetic oil and as a result of use, storage, or handling, has become unsuitable for its original purpose due to the presence of impurities or loss of original properties, but which may be suitable for further use and may be economically recyclable. This also includes absorbent material contaminated with used oil such as oily rags or absorbent blankets. Two types of used oil are defined as follows:

a. Spec. Oil (Specification Oil) - Used oil that meets the following specifications: *

- (i) Arsenic - 5 ppm maximum
- (ii) Cadmium - 2 ppm maximum
- (iii) Chromium - 10 ppm maximum
- (iv) Lead - 100 ppm maximum
- (v) Nickel - 120 ppm maximum
- (vi) Total halogens - 4000 ppm maximum**
- (vii) Flash Point - 100°F (37.8°C) minimum

b. Non-Spec. Oil (Off-Spec. Oil) - Used oil that does not meet the specification above.

* This specification does not apply to used oil fuel mixed with a hazardous waste.

** Used oil containing more than 1000 ppm total halogens is presumed to be a hazardous waste. The burden of proof that this is not true rests with the user.

92. Utility Boiler - A boiler that produces steam, heated air, or other heated fluids for sale or for use in producing electric power for sale.

93. Virgin Fuel - Unused solid, liquid, or gaseous commercial fuel. Also, clean wood or bark that has not been processed other than for size reduction excluding clean wood or bark burned in an air curtain incinerator.

94. Volatile Organic Compound (VOC) - Any organic compound which participates in atmospheric photochemical reactions; or which is measured by a reference method (as specified in 40 CFR 60, as of

July 1, 1990), an equivalent method, an alternative method, or which is determined by procedures specified under any subpart of 40 CFR 60. This includes compounds other than the following compounds:

2-(ethoxydifluoromethyl)-(1,1,1,2,3,3,3-heptafluoropropane)
acetone
(C₄F₉OCH₃) (1,1,1,2,2,3,3,4,4-nonafluoro-4-methoxybutane)
(C₄F₉OC₂H₅) (1-ethoxy-1,1,2,2,3,3,4,4,4-nonafluorobutane)
((CF₃)₂CFCF₂OCH₃,) (2-(difluoromethoxymethyl)-1,1,1,2,3,3,3-heptafluoropropane)
CFC-11 (trichlorofluoromethane)
CFC-12 (dichlorodifluoromethane)
CFC-113 (trichlorotrifluoroethane)
CFC-114 (dichlorotetrafluoroethane)
CFC-115 (chloropentafluoroethane)
ethane
HCFC-22 (chlorodifluoromethane)
HCFC-31 (chlorofluoromethane)
HCFC-123 (dichlorotrifluoroethane)
HCFC-123a (1,2-dichloro-1,1,2-trifluoroethane)
HCFC-124 (2-chloro-1,1,1,2-tetra-fluoroethane)
HCFC-134a (tetrafluoroethane)
HCFC-141b (dichlorofluoroethane)
HCFC-142b (chlorodifluoroethane)
HCFC-151a (1-chloro-1-fluoroethane)
HCFC 225ca (3,3-dichloro-1,1,1,2,2-pentafluoropropane)
HCFC 225cb (1,3-dichloro-1,1,2,2,3-pentafluoropropane)
HFC-23 (trifluoromethane)
HFC-32 (difluoromethane)
HFC 43-10mee (1,1,1,2,3,4,4,5,5,5-decafluoropentane)
HFC-125 (pentafluoroethane)
HFC-134 (1,1,2,2-tetrafluoroethane)
HFC-143a (1,1,1-trifluoroethane)
HFC-152a (1,1-difluoroethane)
HFC-161 (ethylfluoride)
HFC-236ea (1,1,1,2,3,3-hexafluoropropane)
HFC-236fa (1,1,1,3,3,3-hexafluoropropane)
HFC-245ca (1,1,2,2,3-pentafluoropropane)
HFC245ea (1,1,2,3,3-pentafluoropropane)
HFC-245eb (1,1,1,2,3-pentafluoropropane)
HFC-245fa (1,1,1,3,3-pentafluoropropane)
HFC-365mfc (1,1,1,3,3-pentafluoropropane)
methane
methyl acetate
methyl chloroform (1,1,1-trichloroethane)
methylene chloride
parachlorobenzotrifluorides (PCBTF)
perfluorocarbon compounds that fall into these classes:
cyclic, branched, or linear, completely fluorinated alkanes;
cyclic, branched, or linear, completely fluorinated ethers with no unsaturations;
cyclic, branched, or linear, completely fluorinated tertiary amines with no unsaturations; and
sulfur containing perfluorocarbons with no unsaturations and with sulfur bonds only to carbon and fluorine.

perchloroethylene

volatile methyl siloxanes (cyclic, branched, or linear completely methylated siloxanes (VMS)

These compounds have been determined to have negligible photochemical reactivity. For purposes of determining compliance with emission limits, VOC will be measured by the approved test methods. Where such a method also inadvertently measures compounds with negligible photochemical reactivity, an owner or operator may exclude these negligibly reactive compounds when determining compliance with an emissions standard.

95. Waste - Any discarded material including but not limited to used oil, hazardous waste fuel, hazardous waste, medical waste, municipal solid waste, sludge, waste fuel, and waste classification Types 0 through 6 or any material which as a result of use, storage, or handling has become unsuitable for its original purpose due to the presence of impurities or loss of original properties.

a. Type 0 - Trash, a mixture of highly combustible waste such as paper, cardboard, wood boxes, and combustible floor sweepings, from commercial and industrial activities. The mixture contains up to 10% by weight of plastic bags, coated paper, laminated paper, treated corrugated cardboard, oily rags and plastic or rubber scraps.

Typical composition: 10% moisture, 5% incombustible solids and has a heating value of approximately 8500 BTU per pound as fired.

b. Type 1 - Rubbish, a mixture of combustible waste such as paper, cardboard cartons, wood scrap, foliage and combustible floor sweepings, from domestic, commercial and industrial activities. The mixture contains up to 20% by weight of restaurant or cafeteria waste, but contains little or no treated papers, plastic or rubber wastes.

Typical composition: 25% moisture, 10% incombustible solids and has a heating value of approximately 6500 BTU per pound as fired.

c. Type 2 - Refuse, consisting of an approximately even mixture of rubbish and garbage by weight. This type of waste is common to apartment and residential occupancy.

Typical composition: up to 50% moisture, 7% incombustible solids, and has a heating value of approximately 4300 BTU per pound as fired.

d. Type 3 - Garbage, consisting of animal and vegetable wastes from restaurants, cafeterias, hotels, hospitals, markets, and like installations.

Typical composition: up to 70% moisture, up to 5% incombustible solids and has a heating value of approximately 2500 BTU per pound as fired.

e. Type 4 - Human and animal remains, consisting of carcasses, organs and solid organic wastes from hospitals, laboratories, abattoirs, animal pounds, and similar sources.

Typical composition: up to 85% moisture, 5% incombustible solids, and having a heating value of approximately 1000 BTU per pound as fired.

f. Type 5 - By-product waste, gaseous, liquid or semi-liquid, such as tar, paints, solvents, sludge, fumes, etc., from industrial operations. BTU values shall be determined by the individual materials to be destroyed.

g. Type 6 - Solid by-product waste, such as rubber, plastics, wood waste, etc., from industrial operations. BTU values shall be determined by the individual materials to be destroyed.

96. Waste Fuel - Waste that does not meet hazardous waste criteria but has a heat value greater than 5000 BTU/lb.

97. Yard waste - Grass, grass clippings, bushes, shrubs, and clippings from bushes and shrubs that are generated by residential, commercial/retail, institutional, and/or industrial sources as part of maintenance activities associated with yards or other private or public lands. Yard waste does not include construction, renovation, and demolition wastes, which are exempt from the definition of municipal solid waste in this Section. Yard waste does not include clean wood, which is also exempt from the definition of municipal solid waste in this Section.

SECTION II - PERMIT REQUIREMENTS.

A. Construction Permit

1. Applicability

a. Any person who plans to construct, alter or add to a source of air contaminants, including installation of any device for the control of air contaminant discharges, shall first obtain a construction permit from the Department. The Department may grant permission to proceed with minor alterations or additions without issuance of a permit when the Department determines that the alteration or addition will not increase the quantity and will not alter the character of the source's emissions.

b. This regulation will not supersede any State or Federal requirements including but not limited to Federal New Source Performance Standards, National Emission Standards for Hazardous Air Pollutants, Federal or State Prevention of Significant Deterioration Regulations, Hazardous Wastes Management regulations, nor special permit conditions, unless this regulation would impose a more restrictive emission limit.

2. Permit Application

Construction permit applications shall be reviewed and signed by a professional engineer registered to practice in the State of South Carolina (except professional engineers employed by the Federal government preparing applications for the Federal government or other professional engineers exempted from the State registration requirements of the South Carolina Board of Engineers and Land Surveyors) and shall provide, as a minimum, the following information.

- a. The name and location of the plant and its planned operating schedules;
- b. Sufficient description including physical and chemical properties of materials and processes necessary for the Department to determine actual and potential emissions;
- c. Identification of all emission points;
- d. A description, including physical and chemical properties of all emissions;
- e. A complete description including engineering design and operating characteristics of any air pollution control device or system that is to be installed;

f. Source information and calculations to demonstrate compliance with “Good Engineering Practice Stack Height” rules; and

g. Other information as may be necessary for proper evaluation of the proposed source as determined by the Department.

3. The following are exempt from the requirement that the construction permit applications be prepared and submitted by a registered professional engineer provided the proposed unit is identical to a prototype model which has been previously designed or otherwise certified by a professional engineer:

a. Package-type incinerators of 750 pounds/hr rated capacity or smaller which burn types 0 and 1 wastes as defined by the Incinerator Institute of America;

b. Package type incinerators of 500 pounds/hr rated capacity or smaller which burn animal remains excluding those remains that are considered infectious waste; and

c. Package-type boilers of 100×10^6 BTU/hr input capacity or smaller which burn natural gas or virgin oil as fuel.

4. No permit to construct or modify a source will be issued if emissions interfere with attainment or maintenance of any state or federal standard.

B. Operating Permit

1. Original

A written request to obtain an operating permit shall be submitted to the Department at least fifteen (15) days prior to placing any new, increased or altered source into operation.

2. Renewal

Prior to the expiration date of a source's operating permit, the source will be inspected by the Department in order to decide whether to renew the permit. This past record of compliance and future probability of compliance will be given appropriate weight in making the decision regarding renewal.

Any special condition in a permit should be verified during the inspection and specifically mentioned in the report. Any additional provisions that the inspector believes warrants inclusion in the renewed permit are to be clearly and concisely stated in the inspection report.

C. Standard Permit Conditions

All permits shall contain, in addition to such special conditions as the Department finds appropriate, the following standard conditions.

1. No applicable law, regulation or standard will be contravened.

2. All official correspondence, plans, permit applications and written statements are an integral part of the permit.

3. For sources not required to have continuous emission monitors, any malfunction of air pollution

control equipment or system, process upset or other equipment failure which results in discharges of air contaminants lasting for one hour or more and which are greater than those discharges described for normal operation in the permit application shall be reported to the Department within twenty-four hours after the beginning of the occurrence and a written report submitted to the Department within thirty (30) days. The written report shall include as a minimum, the following:

- a. The identity of the stack and/or emission point where the excess emissions occurred.
- b. The magnitude of the excess emissions expressed in the units of the applicable emission limitation and the operating data and calculations used in determining the excess emissions.
- c. The time and duration of the excess emissions.
- d. The identity of the equipment causing the excess emissions.
- e. The nature and cause of such excess emissions.
- f. The steps taken to remedy the malfunction and the steps taken or planned to prevent the recurrence of such malfunction.
- g. The steps taken to limit the excess emissions.
- h. Documentation that the air pollution control equipment, process equipment, or processes were at all times maintained and operated, to the maximum extent practicable, in a manner consistent with good practice for minimizing emissions.

4. Sources required to have continuous emission monitors will make quarterly reports as specified in applicable parts of the Regulations.

D. Exceptions

1. Upon request, the Department may alter operating permits, compliance schedules, or other restrictions on operation of a source provided that resulting ambient air concentration levels will not exceed any national or state ambient air quality standard. Factors to be considered by the Department may include, but are not limited to, technology, economics, national energy policy, and existing air quality. The request by the source must also show the following:

- a. Good faith efforts have been made to comply with the state requirements.
- b. The source is unable to comply with the state requirements because the necessary technology or other alternative methods of control are not reasonably available, or have not been available for a sufficient period of time.
- c. Any available operating procedures, or control measures, reducing the impact of the source on ambient air concentrations, have been implemented.
- d. The request is submitted in a timely manner.

2. The provisions of this paragraph shall not apply to mass emission limits which are imposed upon any source by the following requirements:

- a. Federal New Source Performance Standards;
- b. National Emission Standards for Hazardous Air Pollutants;
- c. Federal or State Prevention of Significant Deterioration Regulations; or,
- d. Non-attainment requirements.

3. Where a permanent increase in the visible emission limitation for a source is requested, the source must demonstrate that it will remain in compliance with the applicable particulate emission standard.

4. Any alternative compliance schedule shall provide for compliance with the applicable regulations as expeditiously as practicable, based on a plan submitted with the request for the alternative compliance schedule.

5. Any request under this section will be subjected to public notice and opportunity for a public hearing. Upon approval by the Board, the recommendations of this Department shall be sent to the Administrator of the Environmental Protection Agency, or his designated representative, for approval or disapproval.

6. Where alternative compliance schedule provisions are contained elsewhere in the air pollution control regulations, those provisions shall supersede the requirements in this section.

E. Transfer of Ownership/Operation

Whenever the ownership/operation of a source has been transferred, the Bureau shall be notified by the new owner/operator within thirty (30) days of the transaction. A transfer of the operation or construction permit will be effective upon written approval by the Department.

F. Exemptions

1. No permits shall be required for the following sources which burn virgin fuel and which were constructed prior to February 11, 1971 and which are not located at a plant that meets the definition of a major source as defined in S.C. Regulation 61-62.70.2(r):

- a. Natural gas boilers.
- b. Oil-fired boilers of 50×10^6 BTU/HR rated input capacity or smaller.
- c. Coal-fired boilers of 20×10^6 BTU/HR rated input capacity or smaller.

2. No permits shall be required for the following sources, unless otherwise specified by S.C. Regulation 61-62.70 or any other State or Federal requirement:

- a. Boilers and space heaters of less than 1.5×10^6 BTU/HR rated input capacity which burn virgin fuel.
- b. Comfort air-conditioning or ventilation systems.
- c. Motor vehicles.

- d. Laboratory hoods.
- e. Emergency power generators of less than 150 KW rated capacity, or those which operate 250 hours per year or less and have a method to record the actual hours of use such as an hour meter.
- f. Sources emitting only steam, air, nitrogen, oxygen, carbon dioxide, or any physical combination of these.
- g. Sources with an uncontrolled particulate matter emission rate of less than 1 lb/hr and/or uncontrolled VOC emission rate of less than 1000 lbs/mo. may not require permits. However, source information needs to be submitted to the Department and a determination on the need for permits will be made.

This determination will take into consideration, but will not be limited to, the nature and amount of the pollutants, location, proximity to residences and commercial establishments, etc.

- h. Sources whose only emissions are fugitive must submit source information, and the need for permit(s) will be made by the Department on a case by case basis. This determination will take into consideration, but will not be limited to the nature and amount of the pollutants, location, proximity to residences and commercial establishments, etc.

G. Conditional Major Source Permits

1. General Provisions

(a) Any stationary source that satisfies the definition of a major source, as defined by S.C. Regulation 61-62.70.2(r), may request to use federally enforceable permit conditions and/or regulation to limit the source's potential to emit and become a conditional major source.

(b) Stationary sources requesting a conditional major source permit shall submit a complete permit application package to the Department.

(c) Stationary sources requesting a conditional major source permit shall undergo the public participation procedures of S.C. Regulation 61-62.1, Section II G(5).

(d) The Department shall act on an application for a conditional major source permit and shall notify the applicant in writing of its approval, conditional approval, or denial.

(e) In the event of a denial of a conditional major source permit application, the Department shall notify the applicant in writing of the reasons for the denial. The Department shall not accept a subsequent conditional major source application until the applicant has addressed the concerns specified by the Department which caused the original denial. The source shall correct all deficiencies noted by the Department or submit a complete Part 70 permit application in order to receive a State Part 70 permit.

2. Existing Sources

(a) Any owner or operator desiring to be permitted as a conditional major source shall submit an operating permit application containing the information identified in Section II G(8), below. A federally enforceable conditional major operating permit shall constrain the operations of the source such that potential emissions fall below the applicable levels and therefore exclude the source from the requirements to have a State Part 70 permit.

(b) A request for a conditional major source permit shall not relieve a source from the requirement to meet the deadline for submittal of a Part 70 permit application.

3. New sources

(a) Any owner or operator who plans to construct, alter, or add to a source of air contaminants, including the installation of any device for the control of air contaminant discharges, and desires a conditional major source permit shall provide a written request to the Department for a federally enforceable construction permit conditioned to constrain the operation of the source, along with a complete construction permit application package containing the information identified in Section II G(8), below. The construction of the new or modified source shall not commence until the source has received an effective permit to construct from the Department.

(b) A written request to obtain an operating permit shall be submitted to the Department no later than fifteen (15) days prior to placing any new or modified source in operation. A satisfactory compliance inspection by a Department representative will precede the issuance of an operating permit for any newly constructed or modified source.

4. Enforceable Permit Conditions

(a) When permit conditions contain production or operational limits, the permit shall have monitoring and/or recordkeeping requirements that allow the Department to verify a source's compliance with the limitations.

(b) When permit conditions require an add-on air pollution control device to be operated at a specified efficiency level, the permit shall have monitoring and recordkeeping requirements that allow the Department to ensure the add-on air pollution control device's performance on a short term basis.

(c) The time period over which a permit limitation on production or operation extends will be as short as possible. For the purpose of determining compliance, permit limitations will in general not exceed one month and shall not exceed an annual limit with a rolling monthly average or sum.

(d) An owner or operator of stationary sources that desire or are required to conduct performance tests to verify emissions limitations shall ensure that source tests are conducted in accordance with the provisions of R.61-62.1, Section IV, Source Tests.

(e) An hourly emission limit shall be sufficient only if the permit condition(s) require the installation, calibration, maintenance, and operation of a continuous emission monitor (CEM) system, or any other monitoring approved by the Department. All monitoring data shall be defined and recorded for showing compliance with the emission limit(s).

(f) The limitations and requirements listed as enforceable permit conditions shall be permanent, quantifiable, or otherwise enforceable as a practical matter.

(g) All permit conditions that constrain the operation of a source in an effort to limit potential to emit shall be federally enforceable. Unless otherwise agreed by the Department and EPA, the Department shall provide to EPA on a timely basis a copy of each proposed (or draft) and final permit intended to be federally enforceable.

5. Public Participation Procedures

(a) Public notice shall be given by publication in a newspaper of general circulation in the area where the source is located or in the State Register and to persons on a mailing list developed by the Department, including those who request in writing to be on the list.

(b) The notice shall identify the affected source; the name and address of the permittee; the name and address of the Department; the activities involved in the permit action; the emission change involved in any permit modification; the name, address, and telephone number of a person from whom interested persons may obtain additional information, including copies of the permit draft, the application, and all other materials available to the Department that are relevant to the permit decision, except for information entitled to confidential treatment (the contents of any proposed or draft permit shall not be treated as confidential information); a brief description of the comment procedures; and the time and place of any public hearing that may be held, including a statement of procedures to request a hearing (unless a hearing has already been scheduled).

(c) The Department shall provide at least 30 days for public and EPA comment and shall give notice of any public hearing at least 30 days in advance of the hearing. The Department shall keep a record of the commenters and also of the issues raised during the public participation process. The Department shall consider, and provide a written response to all written comments received by mail and at the public hearing, within the time specified for the public notice, in making a final decision on the application.

(d) A newly constructed or modified source issued a federally enforceable final construction permit will not require an additional public comment period and/or hearing to obtain an operating permit, unless the source proposes a change in the original construction and/or operational plan, prior to commencing construction, which the Department determines would require an additional public comment period and/or hearing.

(e) Any proposed new or modified stationary source required to undergo a public comment period shall not commence any construction until all public participation procedures of this section are completed, and the source has received an effective construction or operating permit from the Department.

(f) Maintenance activities, repairs, and replacements which the Department determines to be routine for that source category shall not, by themselves, be required to undergo the public participation procedures of S.C. Regulation 61-62.1, Section II G (5)

6. Emergency Provisions

(a) An "emergency" means any situation arising from sudden and reasonably unforeseeable events beyond the control of the source, including acts of God, in which a situation requires immediate corrective action to restore normal operation, and that causes the source to exceed a technology-based emission limitation under the permit, due to unavoidable increases in emissions attributable to the emergency. An emergency shall not include noncompliance to the extent caused by improperly designed equipment, lack of preventative maintenance, careless or improper operation, or operator error.

(b) An emergency constitutes an affirmative defense to an action brought for noncompliance with such technology-based emission limitations if the conditions below in S.C. Regulation 61-62.1, Section II G(6)(c) are met.

(c) The affirmative defense of an emergency shall be demonstrated through properly signed,

contemporaneous operating logs, or other relevant evidence that show:

- (i) An emergency occurred, and the permittee can identify the cause(s) of the emergency;
 - (ii) The permitted source was at the time the emergency occurred being properly operated;
 - (iii) During the period of the emergency, the permittee took all reasonable steps to minimize levels of emissions that exceeded the emission standards, or other requirements in the permit; and
 - (iv) The permittee gave a verbal notification of the emergency to the Department within 24 hours of the time when emission limitations were exceeded, followed by written notification within 30 days. This notice shall fulfill the requirements of S.C. Regulation 61-62.1, Section II C(3)(a) through (h). This notice shall contain a description of the emergency, any steps taken to mitigate emissions, and corrective actions taken.
- (d) In any enforcement action, the permittee seeking to establish the occurrence of an emergency has the burden of proof.
- (e) This provision is in addition to any emergency, or upset provision contained in any applicable requirement.

7. General Permits

- (a) The Department may, after notice and opportunity for public participation provided under S.C. Regulation 61-62.1, Section II. G(5), issue a general permit covering numerous similar sources. Any general permit shall comply with all requirements applicable to other conditional major source permits and shall identify criteria by which sources may qualify for the general permit. To sources that qualify, the Department shall grant the conditions and terms of the general permit. The source shall be subject to enforcement action for operation without a valid permit if the source is later determined not to qualify for the conditions and terms of the general permit.
- (b) Qualified sources seeking coverage under a general permit shall apply to the Department for coverage under the terms of a general permit. Without repeating the public participation procedures required under Section G(5), the Department may grant a source's request for authorization to operate under a general permit, but such a grant shall be a final permit action for purposes of judicial review.
- (c) The Department shall provide timely notice to the public of any authorization given to a facility to operate under the terms of a general permit. Such notice may be made on a periodic, summarized basis covering all facilities receiving authorization since the last notice.

8. Application Requirements

- (a) Construction permit applications shall be reviewed and signed by a professional engineer registered to practice in the State of South Carolina (except professional engineers employed by the Federal government preparing applications for the Federal government or other professional engineers exempted from the State registration requirements of the South Carolina Board of Engineers and Land Surveyors).
- (b) Construction and operating permit applications shall provide, as a minimum, the following information:

(i) name and address of the facility (including street address), name, mailing address, and telephone number of the facility's contact person, and the facility's planned operational schedule;

(ii) potential emission calculations and proposed federally enforceable emission limitations for each emission unit at the facility verifying that the total emissions at the facility will be below the major source (or plant) thresholds;

(iii) identification of all emission units at the facility;

(iv) complete description, including engineering design, removal efficiency, and operation characteristics, of each existing or proposed air pollution control device or system;

(v) all proposed production and/or operational limitations that will constrain the operation of each emission unit that are to be identified as federally enforceable;

(vi) all proposed monitoring parameters, recordkeeping and reporting requirements the applicant will use to determine and verify compliance with the requested federally enforceable limitations on a continuous basis. The applicant shall also provide the compliance status of these proposed parameters and requirements at the time of the application submittal;

(vii) complete listing of all applicable requirements (state and federal) that apply to the facility, at the time of the application submittal; and

(viii) other information as may be necessary for the proper evaluation of the existing or proposed facility as determined by the Department.

(c) The permit application for general permits may deviate from the requirements of Section II G(8)(b) provided that such application includes all information necessary to determine qualification for, and to assure compliance with, the general permit.

(d) The permit application requirements of Section II A(2) shall not be superseded.

H. Synthetic Minor Plant Permits

1. General Provisions

(a) Any stationary source that is a major plant or major modification, as defined by S.C. Regulation 61-62.5, Standard No. 7, may request to use federally enforceable permit conditions to limit the source's potential to emit and become a synthetic minor plant.

(b) Stationary sources requesting a synthetic minor plant permit shall submit a complete permit application package to the Department.

(c) Stationary sources requesting a synthetic minor plant permit shall undergo the public participation procedures of this S.C. Regulation 61-62.1, Section II G(5).

(d) The Department shall act, within a reasonable time, on an application for a synthetic minor plant permit and shall notify the applicant in writing of its approval, conditional approval, or denial.

(e) In the event of a denial of a synthetic minor plant permit application, the Department shall notify the applicant in writing of the reasons for the denial. The Department shall not accept a further

synthetic minor plant permit application until the applicant has addressed the concerns specified by the Department, which caused the denial. The source shall correct all deficiencies noted by the Department within 60 calendar days of receiving notice of the denial, or submit a complete Prevention of Significant Deterioration (PSD) permit application within 180 calendar days of receiving notice that the synthetic minor permit application is denied.

2. New Sources and Major Modifications

(a) Stationary sources desiring to be a synthetic minor plant shall provide a written request to the Department for a federally enforceable construction permit conditioned to constrain the operation of the source, along with a completed construction permit application package to the Department. The construction of the new or modified source shall not commence until the source has received an effective permit to construct.

(b) A written request to obtain an operating permit shall be submitted to the Department no later than fifteen (15) days prior to placing any new or modified source in operation. A satisfactory compliance inspection by a Department representative will precede the issuance of an operating permit for any newly constructed or modified source.

(c) The enforceable permit conditions provisions of S.C. Regulation 61-62.1, Section II G(4) shall apply to synthetic minor plant permits.

(d) The public participation procedures of S.C. Regulation 61-62.1, Section II G(5) shall apply to synthetic minor plant permits.

(e) The emergency provisions of S.C. Regulation 61-62.1, Section II G(6) shall apply to synthetic minor plant permits.

(f) The permit application provisions of S.C. Regulation 61-62.1, Section II G(8), shall apply to synthetic minor plant permits.

3. General Permits

(a) The Department may, after notice and opportunity for public participation provided under Section G(5), issue a general permit covering numerous similar sources. Any general permit shall comply with all requirements applicable to other synthetic minor plant permits and shall identify criteria by which sources may qualify for the general permit. To sources that qualify, the Department shall grant the conditions and terms of the general permit. The source shall be subject to enforcement action for operation without a valid permit if the source is later determined not to qualify for the conditions and terms of the general permit.

(b) Qualified sources seeking coverage under a general permit shall apply to the Department for coverage under the terms of a general permit. Without repeating the public participation procedures required under Section G(5), the Department may grant a source's request for authorization to operate under a general permit, but such a grant shall be a final permit action for purposes of judicial review.

(c) The Department shall provide timely notice to the public of any authorization given to a facility to operate under the terms of a general permit. Such notice may be made on a periodic, summarized basis covering all facilities receiving authorization since the last notice.

SECTION III - EMISSIONS INVENTORY.

Emissions inventory is a study or compilation of pollutant emissions. Emissions inventories are designed to locate air pollution sources, to define the type and size of sources, to define the type and amount of emissions from each source, to determine pollutant frequency and duration, to determine the relative contributions to air pollution from classes of sources and of individual sources and to determine the adequacy of regulations and standards.

The emissions inventory for all major plants will be reviewed annually. Information required for this review will include, but is not limited to, the following:

- A. Information on fuel burning equipment;
- B. Types and quantities of fuel used;
- C. Fuel analysis;
- D. Exhaust parameters;
- E. Control equipment information;
- F. Raw process materials and quantities used;
- G. Design and normal process rates;
- H. Hours of operation;
- I. Significant emission generating points or processes;
- J. Any desired information listed in 40 CFR 51, Appendix E [July 1, 1986].

Every even calendar year a new updated emissions inventory will be completed by the plant for the previous calendar year and submitted to the Department by March 31. All applicable information will be recorded on the current form for reporting emissions data.

In the intervening calendar years, any change in emissions data will be recorded on the annual compliance inspection report.

The above requirements notwithstanding, an emissions inventory may be required at any time in order to determine the compliance status of any plant.

SECTION IV - SOURCE TESTS.

A. Applicability.

1. This Section shall apply to the owner or operator of any source which conducts:

- a. a source test required under an applicable standard or permit condition; or pursuant to a judicial or administrative order, consent agreement, or any other such binding requirement entered into after the effective date of this standard, or

b. any other source test from which data will be submitted to the Department for any purpose including but not limited to: determination of applicability of regulatory requirements, development of emission factors, establishment of parameters for compliance assurance monitoring, continuous emission monitor performance specification testing, and Relative Accuracy Test Audits (RATA).

2. The Department may, on a case-by-case basis, exempt from the requirements of this Section source tests which are performed for development of emission factors or for determination of applicability of regulations.

B. Submission and Approval of a Site-Specific Test Plan.

1. Prior to conducting a source test subject to this Section, the owner or operator shall ensure that:

a. a written site-specific test plan including all of the information required in paragraph C below has been developed and submitted to the Department. If the Department has previously approved a site-specific test plan the owner or operator may submit a letter which references the approved plan and which includes a thorough description of amendments to the plan; and

b. written Department approval of the site-specific test plan, methods, and procedures has been received.

2. All test methods included in the site-specific test plan must be either EPA Reference Methods described in 40 CFR Part 51, Appendix M, or 40 CFR Part 60, Appendix A, or 40 CFR Part 61, Appendix B, or 40 CFR Part 63, Appendix A. If an applicable air regulation or permit provides for a choice of test methods, the selected method must be approved by the Department. If an applicable air regulation or permit does not specify use of an EPA standard reference method, the alternative test method to be used must be approved by the Department.

3. a. The owner or operator of a source proposing to use alternative source test methods shall ensure that the alternative source test method is either validated according to EPA Reference Method 301 (40 CFR Part 63, Appendix A, December 29, 1992), and any subsequent amendments or editions, or approved by the Department.

b. The owner or operator shall ensure that requests for approval of alternative source test methods are submitted to the Department along with the site-specific test plan, and that the submission contains all of the information required by paragraph C below.

4. The Department shall determine whether any source test method proposed in the site-specific test plan is appropriate for use.

5. a. The owner or operator shall submit site-specific test plans or a letter which amends a previously approved test plan at least 45 days prior to the proposed test date. Sources conducting tests for substances listed in Regulation 61-62.5, Standard No. 8, shall submit site-specific test plans or a letter which amends a previously approved test plan at least 60 days prior to the proposed test date.

b. If the only amendments to a previously approved test plan are to facility information included in paragraph C.1 below, the requirement in B.5.a will not apply. The owner or operator, however, shall submit the amendments at least two weeks prior to the proposed test date.

6. Within 30 days of site-specific test plan receipt, the Department will notify the owner or operator of site-specific test plan approval or denial or will request additional information.

7. The owner or operator shall submit any additional information requested by the Department necessary to facilitate the review of the site-specific test plan.

8. Approval of a site-specific test plan for which an owner or operator fails to submit any additional requested information will be denied.

9. Neither the submission of a site-specific test plan, nor the Department's approval or disapproval of a plan, nor the Department's failure to approve or disapprove a plan in a timely manner shall relieve an owner or operator of legal responsibility to comply with any applicable provisions of this Section or with any other applicable Federal, State, or local requirement, or prevent the Department from enforcing this Section.

C. Requirements for a Site-Specific Test Plan.

A site-specific test plan shall include, at a minimum, the following:

1. Facility Information:

- a. Facility name, address, and telephone number, and name of facility contact.
- b. Facility permit number and source identification number.
- c. Name, address, and telephone number of the company contracted to perform the source test.
- d. Name, address, and telephone number of the laboratory contracted to perform the analytical analysis of the source test samples.

2. Test Objectives:

- a. Description and overall purpose of the tests (for example, to demonstrate compliance, to establish emission factors, etc.).
- b. Citation of any applicable State or Federal regulation or permit condition requiring the tests.

3. Process Descriptions:

- a. Description of the process including a description of each phase of batch or cyclic processes, and the time required to complete each phase.
- b. Process design rates and normal operating rates.
- c. Proposed operating rate and conditions for the source test.
- d. Methods including proposed calculations, equations, and other related information that will be used to demonstrate and verify the operating rate during the source test.
- e. Description of any air pollution control equipment.
- f. Description of any stack gas or opacity monitoring systems.

g. Description of all air pollution control monitors (for example, pressure gauges, flow indicators, cleaning cycle timers, electrostatic precipitator voltage meters, etc.) when applicable.

h. A list of process and air pollution control operating parameters that will be recorded during the tests, the responsible party who will record these readings, and the frequency at which readings will be recorded.

4. Safety Considerations:

a. Identification of any risks associated with sampling location and accessibility, toxic releases, electrical hazards, or any other unsafe conditions, and a plan of action to correct or abate these hazards.

b. List of all necessary or required safety equipment including respirators, safety glasses, hard hats, safety shoes, hearing protection, and other protective equipment.

5. Sampling and Analytical Procedures:

a. Description of sampling methods to be used.

b. Description of analytical methods to be used.

c. Number of tests to be conducted.

d. Number of runs comprising a test.

e. Duration of each test run.

f. Description of minimum sampling volumes for each test run.

g. Location where samples will be recovered.

h. Explanation of how blank and recovery check results and analytical non-detects will be used in final emission calculations.

i. Maximum amount of time a sample will be held after collection prior to analysis.

j. Method of storing and transporting samples.

6. Sampling Locations and Documentation:

a. Schematics of sampling sites (include stack dimensions and distances upstream and downstream from disturbances).

b. A description of all emission points, including fugitive emissions, associated with the process to be tested, and when applicable, the method that will be used to measure or include these emissions during the source test.

c. Procedure for verifying absence of cyclonic or non-parallel stack gas flow.

7. Internal Quality Assurance/Quality Control (QA/QC) Measures. For each proposed test method when applicable:

a. Citation of the QA/QC procedures specified in the EPA Reference Methods and the EPA Quality Assurance Handbook for Air Pollution Measurement Systems, Volume III.

b. Chain-of-custody procedures and copies of chain-of-custody forms.

c. Procedure for conditioning particulate matter filters (before and after source testing).

d. Procedure for conducting leak checks on vacuum lines, pitot tubes, flexible bags, orsats, etc.

e. Equipment calibration frequencies, ranges, and acceptable limits.

f. Minimum detection limits of analytical instrumentation.

g. Names, addresses and responsible persons of all sub-contracting laboratories and a description of analytical methods to be used, chain-of-custody procedures and QA/QC measures.

h. QA/QC measures associated with the collection and analysis of process or raw material samples and the frequency at which these samples will be collected.

i. Methods for interference and matrix effects checks, and number of replicate analyses.

j. Methods and concentrations for internal standards (standards additions prior to extraction).

k. Methods and concentrations for surrogate standards (standards additions to collection media prior to sampling).

l. Methods for recovery checks, field blanks, lab blanks, reagent blanks, proof rinse blanks, and analytical blanks.

m. Proposed range of recoveries for data acceptability and method of data interpretation if sample recovery is not within the proposed range.

8. Final Test Report Content:

a. Final report outline.

b. Example calculations when using alternative test methods or for calculation of process operating rates.

c. Proposed report submission date if more than 30 days after the source test will be needed to complete the report.

D. Notification and Conduct of Source Tests.

1. Prior to conducting a source test subject to this Section, the owner or operator shall ensure that written notification is submitted to the Department at least two weeks prior to the test date. Submission of a site-specific test plan or amendments to a previously approved test plan does not constitute notification.

2. In the event the owner or operator is unable to conduct the source test on the date specified in the notification, the owner or operator shall notify the Department as soon as practical by telephone and

follow up in writing within 30 days. Telephone notification shall include a description of the circumstance(s) causing the cancellation of the test, and a projected retest date. The written follow-up report shall include a description of the condition(s) which prevented the source test from being conducted, and when applicable, what corrective action was performed, or what equipment repairs were required.

3. Rescheduling of canceled source tests must meet the two-week notice requirement. However, shorter notification periods may be allowed subject to Department approval.

4. All tests shall be made by, or under the direction of, a person qualified by training and/or experience in the field of air pollution testing.

5. Unless approved otherwise by the Department, the owner or operator shall ensure that source tests are conducted while the source is operating at the maximum expected production rate or other production rate or operating parameter which would result in the highest emissions for the pollutants being tested. Examples of the operating parameters that may effect emission rates are: type and composition of raw materials and fuels, isolation of control equipment modules, product types and dimensions, thermal oxidizer combustion temperature, atypical control equipment settings, etc. Some sources may have to spike fuels or raw materials to avoid being permitted at a more restrictive feed or process rate. Any source test performed at a production rate less than the rated capacity may result in permit limits on emission rates, including limits on production if necessary.

6. When conducting a source test subject to this Section, the owner or operator of a source shall provide the following:

- a. Department access to the facility to observe source tests.
- b. Sampling ports adequate for test methods.
- c. Safe sampling site(s).
- d. Safe access to sampling site(s).
- e. Utilities for sampling and testing equipment.
- f. Equipment and supplies necessary for safe testing of a source.

E. Source Test Method Audit Program.

1. The Department may request that samples collected during any source tests be split with the Department for analysis by an independent or Department laboratory. Any request for split samples will be made in advance of the source test.

2. The owner or operator shall analyze performance audit samples provided by the Department. If the Department does not provide performance audit samples to the owner or operator, the Department thereby waives the requirement to conduct a performance audit.

3. A waiver of performance audit requirements to conduct a performance audit for a particular source test under E.2 above does not constitute a waiver of performance audit requirements for future source tests.

4. The Department shall have discretion to require any subsequent remedial actions of the owner or operator based on the split samples and/or performance audit results.

F. Final Source Test Report.

1. The owner or operator of a source subject to this Section shall submit a written report of the final source test results to the Department by the close of business on the 30th day following the completion of the test, unless an alternative date has been requested in and approved with the site-specific test plan prior to testing or is otherwise specified in a relevant Federal or State standard.

2. The final test report for each site-specific test plan shall contain, at a minimum, the following supporting information when applicable:

- a. Summary of the results.
- b. Emission calculations and emission rates in units of the applicable standard, permit limit, etc.
- c. Allowable emission rates in units of the applicable standard, permit limit, etc.
- d. Source compliance status.
- e. Process operating rates.
- f. Methods including actual calculations, equations, and other related information that were used to demonstrate and verify the operating rate during the source test.
- g. Chain of custody records.
- h. Certification of all reference standards used.
- i. Signature of a responsible facility representative who can verify process operating rates and parameters.
- j. Legible copies of all raw laboratory data (for example, filter tare and final weights, titrations, chromatograms, spectrograms, analyzer measurements, etc.).
- k. Legible copies of all raw field data (for example, strip charts, field data forms, field calibration forms, etc.).
- l. Legible copies of applicable stack gas or opacity monitoring system readings identified in the approved site-specific test plan.
- m. Legible copies of all applicable process and air pollution control operating parameter readings identified in the approved site-specific test plan.
- n. Results of all calibrations and QA/QC measures and checks identified in the approved site-specific test plan.
- o. Results of performance audits pursuant to paragraph E.
- p. Description of any deviations from the proposed process operations as approved in the site-

specific test plan during testing.

q. Description of any deviations from approved sampling methods/procedures.

r. Description of any deviations from approved analytical procedures.

s. Description of any problems encountered during sampling and analysis, and explanation of how each was resolved.

G. Non-Compliant Results.

Within fifteen days of submission of a test report indicating non-compliance, the owner or operator shall submit to the Department a written plan which includes at a minimum:

1. interim actions being taken to minimize emissions pending demonstration of compliance;
2. corrective actions that have been taken or that are proposed to return the source to compliance;
3. method that will be used to demonstrate the source has returned to compliance (for example, retest and proposed date);
4. any changes necessary to update the site-specific test plan prior to a retest.

H. Analytical Observation. Upon request by the Department, the owner or operator or the source test consultant shall ensure that Department representatives are provided access to the analytical laboratory for observation of instrument calibrations and analysis of field and audit samples.

I. Site Inspection. Upon request by the Department and prior to approval of the site-specific test plan, the owner or operator shall ensure Department representatives are provided access to the site for inspection of the source(s) to be tested.

J. Modifications. Modifications to the approved site-specific test plan must have prior Department approval. Approval shall be considered on a case-by-case basis. Failure to obtain prior Department approval may cause final test results to be unacceptable.

SECTION V - CREDIBLE EVIDENCE

A. The Department promulgated Regulation 61-62, *Air Pollution Control Regulations and Standards*, and developed the *South Carolina Air Quality Implementation Plan* to provide enforceable emission limitations, to establish an adequate enforcement program, to require owners or operators of stationary sources to monitor emissions, submit periodic reports of such emissions and maintain records as specified by various regulations and permits, and to evaluate reports and records for consistency with the applicable emission limitation or standard on a continuing basis over time. The monitoring data collected and records of operations would serve as the basis for a source to certify compliance, and could be used by the Department as direct evidence of an enforceable violation of the underlying emission limitation or standard.

B. The purpose of this section is:

1. To clarify the statutory authority of Regulation 61-62, *Air Pollution Control Regulations and Standards*, and the *South Carolina Air Quality Implementation Plan*, whereby non-reference test data and various kinds of information already available and utilized for other purposes may be used to demonstrate

compliance or noncompliance with emission standards.

2. To eliminate any potential ambiguity regarding language that has been interpreted to provide for exclusive reliance on reference test methods as the means of certifying compliance with various emission limits.

3. To curtail language that limits the types of testing or monitoring data that may be used for determining compliance and for establishing violations.

C. The following is applicable in the determination of non-compliance by the Department or for compliance certification by the owners or operators of stationary sources.

1. Enforcement - Consistent with South Carolina's Environmental Audit Privilege and Voluntary Disclosure Act, codified as S.C. Code Ann. Sections 48-57-10 *et seq.* (Supp. 2000), and notwithstanding any other provision in the *South Carolina Air Quality Implementation Plan*, any credible evidence or information relevant to whether a source would have been in compliance with applicable requirements if the appropriate performance or compliance test had been performed, can be used to establish whether or not a person has violated or is in violation of any standard in the plan.

2. Compliance Certifications - Consistent with South Carolina's Environmental Audit Privilege and Voluntary Disclosure Act, codified as S.C. Code Ann. Sections 48-57-10 *et seq.* (Supp. 2000), and notwithstanding any other provision in the *South Carolina Air Quality Implementation Plan*, the owner or operator may use any credible evidence or information relevant to whether a source would have been in compliance with applicable requirements if the appropriate performance or compliance test had been performed, for the purpose of submitting compliance certifications.

R. 61-62.1 History - *South Carolina State Register*:

Vol. 7, Issue No. 2, (Doc. No. ?), February 25, 1983;
Vol. 7, Issue No. 6, (Doc. No. 314), June 24, 1983;
Vol. 9, Issue No. 5, (Doc. No. 457), May 24, 1985;
Vol. 10, Issue No. 5, (Doc. No. ?), May 23, 1986;
Vol. 12, Issue No. 2, (Doc. No. 769), February 26, 1988;
Vol. 12, Issue No. 4, (Doc. No. 970), April 22, 1988;
Vol. 13, Issue No. 2, (Doc. No. 868), February 24, 1989;
Vol. 13, Issue No. 3, (Doc. No. 1053), March 24, 1989;
Vol. 14, Issue No. 6, (Doc. No. 1067), June 22, 1990;
Vol. 14, Issue No. 9, (Doc. No. 1267), August 24, 1990;
Vol. 14, Issue No. 9, (Doc. No. 1310), August 24, 1990;
Vol. 16, Issue No. 6, (Doc. No. 1507), June 26, 1992;
Vol. 19, Issue No. 6, (Doc. No. 1798), June 23, 1995;
Vol. 20, Issue No. 1, (Doc. No. 1913), January 26, 1996;
Vol. 22, Issue No. 6, (Doc. No. 2244), June 26, 1998;
Vol. 22, Issue No. 8, (Doc. No. 2328), August 28, 1998;
Vol. 23, Issue No. 6, (Doc. No. 2352), June 25, 1999;
Vol. 24, Issue No. 5, (Doc. No. 2444), May 26, 2000;
Vol. 25, Issue No. 7, (Doc. No. 2622), July 27, 2001;
Vol. 25, Issue No. 10, (Doc. No. 2648), October 26, 2001.
Vol. 26, Issue No. 8, (Doc. No. 2736), August 23, 2002.
Vol. 27, Issue No. 6, (Doc. No. 2840), June 27, 2003.